

2.2. AIDS Trends in Tennessee: 1982-1995

One method of examining AIDS trends over time is through cumulating percentages of AIDS cases by year of diagnosis for each year from 1982 through 1995.¹⁴ Figure 2.2.1a shows numbers and percentages of adult/adolescent AIDS cases by year of diagnosis from 1982 through 1995, reported as of March, 1996. The majority of cases among adults and adolescents in Tennessee have been diagnosed in the past four years for all age, sex and racial groups, notwithstanding incomplete reporting (Figure 2.2.1a).

Figure 2.2.1b shows the same data with cumulative percentages of cases for the period. Graphing these cumulative percentages creates a curve ending at 100% (Figure 2.2.1b). The curve reveals information about the rate of change of case accrual as well as the direction of change. If the curve (sometimes called an epidemic curve) rises sharply, an accelerated rate of case accrual is indicated. If it rises regularly, an even rate of increase is suggested. For each yearly interval, the percentage of cases added to the cumulative total is given by subtracting the percentage of cases in that year from the cumulative percentage of cases for the preceding year. For a given year, the cumulative percentage indicates the proportion of all AIDS cases diagnosed through to the end of the observation period that had been diagnosed to that point. Interpreting the accelerating rate of AIDS diagnosis is difficult due to the 1993 expansion of the AIDS case definition and to the possibility that AIDS case diagnosis and reporting have improved over time. Data for 1995 are also incomplete, and this biases the series. However, a time trend analysis is a useful tool for comparing the course of the epidemic within and between groups.

Of all adolescent and adult AIDS cases diagnosed in Tennessee through 1995, only 8% had been diagnosed by the end of 1987. Approximately 45% of the cases were diagnosed in the ensuing five year period from 1988 through 1992. From 1993 through 1995, the remaining 47% of cases were diagnosed. Around fourteen percent of all adolescent and adult AIDS cases ever diagnosed in Tennessee were diagnosed in 1994 (Figure 2.2.1b). It appears from preliminary data reported through March 1996 that a similar proportion were diagnosed in 1995 (15.4%). However, complete reporting for 1995 will further increase this proportion. In general, for Tennessee, the shape of this curve reveals an increasing rate of AIDS diagnosis.

AIDS trends by age-group at time of diagnosis with AIDS are shown for ages 0-12, 13-19, 20-24, 25-29, 30-39 and 40 years and older. They are very similar (Table 2.2.1), and hence age is not a major correlate of the shape of the curve. While the rate of diagnosis among adult/adolescent cases is similar across age-groups, for pediatric AIDS cases, there was a sharper increase from 1987 until 1993.

¹⁴ Year of diagnosis, rather than year of report, is used as the unit of analysis throughout this report, unless specifically noted otherwise.